

CONFIDENTIAL

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Fort Davis Station
Washington, D. C. 20020

REGISTERED

(See attached list for
names of solicited bidders)

27 SEP 1966

Attention:

Subject : Request for Proposal No. RD-3-67
Project No. 10047

Gentlemen:

This office has a requirement for a Program for Development of Color Dryers as follows:

- a. COLOR SHEET FILM DRYER
- b. COLOR PRINT DRYER

Your review of the enclosed "DEVELOPMENT OBJECTIVES" for each requirement is requested and technical proposal and cost and price quotation is solicited. You may elect to submit a proposal for the complete program or a separate proposal covering only one of the requirements.

The Government reserves the right to award a single contract, covering the entire program, or to award separate contracts for each requirement.

Prior to the submission of your proposal if a conference is desired between your technical representatives and the technical representatives of the Government you may arrange for such a conference by contacting [REDACTED]

Your technical proposal and cost quotation should be submitted no later than 31 October 1966 unless a later date is requested of and authorized by [REDACTED]. It is requested that your proposal be accompanied by a cost analysis breakdown to assist in evaluating your quotation. This cost breakdown may be prepared on Form DD-633 or a substantially similar form. Two copies of the proposal should

NOTICE

This material contains information affecting the national defense of the United States within the meaning of the espionage laws, Title 18, USC, Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

DECLASS REVIEW BY NIMA / DoD

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be forwarded directly to the Contracting Officer. Three copies should be forwarded to the Technical Representative of the Contracting Officer at the following address:

Southwest Station
Washington, D. C. 20024

The enclosed development objectives may be considered DE-CLASSIFIED when removed from this covering letter which may NOT be de-classified. Government interest may be shown, however, association of this Government activity with this request is classified CONFIDENTIAL. In this connection, knowledge of the identity of the particular Government activity which the undersigned represents must be restricted to the least number of persons possible and then only to those who have been authorized in writing by this activity to have access to classified information. Such identity shall be disclosed only on a verbal basis and shall never appear in writing in any of your documents. Any correspondence initiated by you should not make reference therein to the undersigned. "Secrecy Agreements" should be signed by any individual in your company who will have knowledge of this request.

If it is desired to proceed with this contemplated program with your company, the authorization will be effected by the issuance of the appropriate type of Government Contract.

At the time of submitting the requested proposal(s) please return this letter, together with all enclosures, to the undersigned at the address stipulated above, Attention: [REDACTED]. If you do not elect to submit a proposal, this letter and all correspondence should also be returned.

Very truly yours,

[REDACTED]
Contracting Officer

Enclosures:

1. Specification No. DB-1001
(1 copy)
2. Development Objectives - Color Sheet
Film Dryer (2 copies)
3. Development Objectives - Color Print
Dryer (2 copies)

Distribution:

Original - Addressee

1 - PD File (RFP-RD-3-67)

1 - NPIC/Reg. Office

1 - NPIC/PADS

1 - NPIC Chrono

LB/SS/NPIC [REDACTED] ept. 66)

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Approved For Release 2001/08/13 : CIA-RDP78B04747A001400010020-4

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Specification No. DB-1001
Issue Date: 31 August 1966

CONTRACTUAL DOCUMENTATION TO BE SUPPLIED BY CONTRACTORS

1. SCOPE

- 1.1 This Specification covers the contractual documentation to be supplied by contractors in the performance of Research and Development contracts.

2. REQUIREMENTS

- 2.1 General - In order to maintain proper control of the progress and funding of Research and Development contracts, it is necessary that certain orderly reporting be accomplished by the Contractor on a regularly scheduled basis.

- 2.1.1 All documentation submitted by the Contractor shall bear the control number assigned by the Contracting Officer's Technical Representative. This control number shall appear on all correspondence, reports, etc., submitted by the contractor under the contract.

- 2.2 Types of Reports - The following types of reports shall be submitted by the contractor. Specific reports shall include, but not necessarily be limited to, the designated information.

- 2.2.1 Monthly - A monthly report shall be prepared as of the last working day of each calendar month. The first monthly report shall be prepared as of the last working day of the first full calendar month subsequent to the date of contract. Monthly reports shall be mailed so as to reach the consignee(s), stated in the contract, not later than the first business day after the fifteenth of the month following the reporting period. Each Monthly report shall provide the following, with negative reporting if applicable.

- 2.2.1.1 A statement of the activity on the project during the month and the percentage of work completed as of the reporting date.
- 2.2.1.2 A statement of the planned activity for the next month.
- 2.2.1.3 A statement of pending, unresolved technical problems.
- 2.2.1.4 A statement of pending, unresolved contractual problems.
- 2.2.1.5 A statement for the record, of agreements or understandings reached orally during the reporting period on technical matters not requiring the approval of the Contracting Officer.
- 2.2.1.6 A statement of any proposed change, agreement or understanding which requires the approval of the Contracting Officer. The contractor is cautioned not to proceed in a situation requiring the prior approval of the Contracting Officer until such approval has been obtained. In situations requiring correspondence with the Contracting Officer, a complimentary copy shall be forwarded, simultaneously, directly to the Contracting Officer's Technical Representative.
- 2.2.1.7 A statement of unanswered, unresolved matters, unanswered correspondence, etc. and whether delinquency is attributed to the contractor or to the Government.
- 2.2.1.8 Status of funds. The format shown in Enclosure 1 shall be used to report the status of funds. All applicable items shall be reported. If no expenditures or obligations have been incurred for a specific item, the word "None" shall be entered in the space assigned for the dollar amount.

2.2.2 Final Report - The final report shall be submitted to the Contracting Officer's Technical Representative on or before the thirtieth day following completion of the work under the contract. This report shall cover the entire design and/or development work accomplished during the period of performance and shall contain a section covering the work performed under each of the tasks set forth in the Work Statements. The report shall state concisely but completely the major problems encountered, the apparent cause of the problems, the problem solutions and an evaluation of the solutions based on actual application of the solutions.

2.2.3 Installation Engineering Data - Whenever hardware is a deliverable item under a contract the contractor shall provide the Installation Engineering Data requested on Enclosure 2. The Contracting Officer's Technical Representative shall provide the blank forms to the Contractor. Preliminary data shall be submitted to the Contracting Officer's Technical Representative at six months and again at three months prior to the delivery date of the equipment. Final data shall be submitted by the contractor not less than thirty days prior to the delivery of the equipment.

2.2.3.1 The outline drawing, submitted with the Installation Engineering Data form shall show:

- (a) the orientation of the equipment within the work area for normal equipment useage.
- (b) the exact location of all external connections.
- (c) the clearance required around the equipment for access to all removeable panels, doors, etc.
- (d) the location of mounting points and type of mounting required.

2.3 Delivery of Reports - All monthly reports and the final report shall be forwarded by the contractor to the Consignee(s) specified in the contract. The contractor shall forward each report in the number of copies specified in the contract.

2.3.1 The Installation Engineering Data form plus the outline drawing shall be forwarded to the Contracting Officer's Technical Representative.

Specification No. DB-1001

Statement of Funds as of 30 September 19XX (See Note 1)

EXPENDITURES

1. Labor:			
a. Total paid as of 31 August 19XX		XX,XXX	
b. Paid during September 19XX		X,XXX	
c. Sub-total		<u>X,XXX</u>	XX,XXX
2. Material:			
a. Total paid as of 31 August 19XX		X,XXX	
b. Paid during September 19XX		XXX	
c. Sub-total		<u>XXX</u>	X,XXX
3. Services (sub-contracts, etc.):			
a. Total paid as of 31 August 19XX		X,XXX	
b. Paid during September 19XX		XXX	
c. Sub-total		<u>XXX</u>	X,XXX
4. Total expenditures as of 30 September 19XX			<u>X,XXX</u> XX,XXX

OBLIGATIONS AND ESTIMATES

5. Obligations:			
a. Sub-contract W/ABC Co., amount not yet paid		X,XXX	
b. Sub-contract W/DEF Co., amount not yet paid		XXX	
c. Material ordered but not yet paid for		XXX	
d. Sub-total		<u>XXX</u>	X,XXX
6. Estimates of Future Expenditures:			
a. Estimate of labor required		X,XXX	
b. Estimate of material required		XXX	
c. Proposed sub-contracts		XXX	
d. Sub-total		<u>XXX</u>	X,XXX
Total			<u>X,XXX</u> XX,XXX

NOTES:

1. All amounts shown above must include overhead, G&A, handling charges, fees, etc.

INSTALLATION ENGINEERING DATA

(See Remarks at end of form)

Date form completed _____

Tentative ☐ Valid until _____

Final data ☐ _____

I. INSTRUMENT

- A. Name of instrument: _____
 B. Manufacturer: _____
 C. Contract number: _____
 D. Delivery date: Tentative: _____ Final: _____

II. PHYSICAL FEATURES

- A. Sub-assemblies:
 1. Number of sub-assemblies: _____
 2. Largest sub-assembly: Weight _____ lbs; _____" H x _____" W x _____" D
 3. Heaviest sub-assembly: Weight _____ lbs; _____" H x _____" W x _____" D
 B. Assembled instrument:
 1. Number of major components: _____
 2. Largest component: Weight _____ lbs; _____" H x _____" W x _____" D
 3. Heaviest component: Weight _____ lbs; _____" H x _____" W x _____" D
 4. Total floor space required after assembly, including maintenance access space. _____ Ft. _____ In. High x _____ Ft. _____ In. Wide x _____ Ft. _____ In. Deep.
 5. Total weight of assembled instrument: _____ lbs.
 C. Type of base of mount: Flat _____; 3-point suspension _____; 4-point suspension _____
 D. Does the instrument have built-in mobility? Yes _____ No _____
 E. Is the instrument particularly sensitive to vibration? Yes _____ No _____
 Will the instrument generate vibration? Yes _____ No _____
 Are any special or unusual tools or fixtures necessary or advisable for the installation of the maintenance of this instrument? Yes _____ No _____.
 If "Yes," please describe: _____

III. UTILITIES

- A. Electrical:
 1. Voltage _____ Volts ^{AC} / _____ Volts ^{DC}
 2. Current _____ Amps/phase _____ Amps
 3. Frequency _____ cps
 4. Nr. of phases _____ Ph
 5. Nr. of wires _____
 6. Power required _____ Watts
 7. Power factor _____ (Leading) (Lagging)
 8. Type of outlet: Two prong _____; three prong _____; Twist lock _____; Perm. _____
 9. Type of ground: Building conduit _____; Direct earth ground _____
 10. Should the instrument be shielded, either from external electromagnetic signals or to prevent interference with other equipment? Yes _____ No _____.
 If "Yes," to what extent? _____

B. Air conditioning:

1. Desired environment: Room air temperature of ____ °F / ____ °F and relative humidity of ____ % / ____ %.
2. Input Air: Is a direct connection necessary? Yes ____ No ____; Adviseable? Yes ____ No ____; If "Yes," what is the connector type and size? ____ Recommended input air temperature ____ °F / ____ °F. Relative humidity ____ % / ____ %. If input air must be filtered, what is the maximum particle size in microns? ____ What particle count? ____ / cu. ft.
3. Output Air: Is a direct connection to the return air duct necessary? Yes ____ No ____; Adviseable? Yes ____ No ____; Connector type and size? ____ Output air temperature ____ °F / ____ °F. Relative humidity ____ % / ____ %. Output heat ____ BTU/Hr. Flow of ____ CFM. Is output air toxic? Yes ____ No ____; Noxious? Yes ____ No ____.

C. Plumbing:

1. Is water required? Yes ____ No ____; Pressure ____ PSIG, flow ____ GPM.
2. Type of water required:
 Tap ____ °F / ____ °F Deionized ____ °F / ____ °F
 Tempered ____ °F / ____ °F Filtered ____ °F / ____ °F
 If filtered, give maximum permissible particle size in microns and the maximum permissible count. ____ microns ____ particles/cu. ft.
3. Pipe required:
 Galvanized ____ Copper ____ Size ____
 Stainless Steel ____ Plastic ____ Type of connector ____
4. Floor drain:
 Diameter of drain ____ Galvanized drain? ____
 Plastic drain? ____ Glass drain? ____
5. Are any chemical solutions used in the device? Yes ____ No ____; If "Yes," state the nature of the solution(s), permissible temperature range, flow rate in appropriate units and the filtration necessary for each solution ____
6. Size of pipes and connectors ____

D. Compressed air:

Is compressed air required? Yes ____ No ____; Water free? ____ Oil Free? ____
 Type and size of connector? ____ Pressure ____ PSIG. Flow in CFM
 Maximum ____, minimum ____, average ____.

E. Vacuum:

Is vacuum required? Yes ____ No ____; Pressure ____ PSIA or (inches of water) (millimeters of mercury). Displacement in CFM, maximum ____, minimum ____, average ____; Type and Size of connectors ____.

F. Peripheral Devices:

Will the instrument be connected to any peripheral devices such as a computer or data input or data output device? Yes ____ No ____; If "Yes," give, in detail, the nature of the connection to the peripheral device such as coaxial cable, multiple wire connector, etc.

IV. REMARKS

- A. Use additional sheets if more space is required for environmental conditions or utilities not mentioned above.
- B. Submit three typed copies of the completed form to the Technical Representative.

- C. Attach three copies of a dimensioned outline drawing of each major component and of the completed assembly. Include the estimated weight of each major component and of the completed assembly. Indicate, on the outline drawing of the completed assembly, the space required for access to the instrument for maintenance.
- D. If a question does not apply to the instrument, insert "N/A" (Not Applicable) in the appropriate blank space.

Information provided by:

(Signature)

(Position or job title)

DEVELOPMENT OBJECTIVE

COLOR SHEET FILM DRYER

1.0 INTRODUCTION:

1.1 PURPOSE: This document contains the requirements for a Government sponsored study and development project covering the investigation of advanced methods of drying photographic color sheet films.

1.2 BACKGROUND: Proper drying of color cut sheet film materials has always been a difficult problem. Many of the methods and techniques employed to dry black and white photographic materials cannot be successfully applied to color films due to the softness of the color emulsions and the tendency of these emulsions to become excessively "tacky" during the drying process.

1.2.1 CURRENT PROCEDURE: Cut sheet color films, both transparency and negative materials, are presently dried in a drying chamber or cabinet. The films are usually placed in film hangers in the drying cabinet and hot air is circulated around the film. This method is time consuming and does not dry the film in a quality fashion, that is, does not dry the film so that there is no evidence of water marks, abrasions, scratches, image distortion, peeling, curl, fading, color shifts, mottling, etc.

2.0 CONCEPT

2.1 PURPOSE: The proposed program will encompass a thorough investigation and analysis of all advanced techniques in the area of film drying. These techniques will be evaluated and the most practical and feasible method of color sheet film drying will be selected. Based on the selected technique a prototype color film dryer will then be developed which will not only dry color sheet film rapidly but which will also overcome the quality defects specified in Par 1.2.1.

2.2 SCOPE: The total effort, as outlined above, will be divided into two separate but interrelated phases; continuance from the first phase to the second phase will be dependent on the successful accomplishments of Phase I. Proposals solicited at this time are restricted to the tasks outlined in Phase I.

2.2.1 Phase I: INVESTIGATION AND DESIGN ANALYSIS

The contractor is expected to extensively and exhaustively investigate all advanced drying techniques (example: air bearing, ultrasonics) that may apply to the problem of drying both color negative and color positive types of sheet film. Emphasis should be placed on feasible and practical solutions directed toward a rapid, automated, high quality drying system. The techniques must be applicable to a system which will dry color film in the best quality manner possible; (Ref. Par. 1.2.1). At the conclusion of the investigation portion of Phase I, the contractor will present to the Government Representative a recommended technique or techniques which can be applied to the development of a color film dryer. Advantages and disadvantages and ease of application of each alternate technique will be presented. Upon concurrence of the recommendations by the Government, the contractor will proceed to develop laboratory models or breadboard hardware which will successfully demonstrate the application of the recommended technique.

2.2.2 Phase II: EQUIPMENT PROTOTYPE

Based upon the successful demonstration of techniques in Phase I, it is presently planned to proceed to a hardware prototype stage. The prototype hardware will be suitable for installation and use in an operational area. More definitive specifications for the prototype equipment will accompany the request for a proposal for performing this phase of the program.

3.0 GENERAL:

3.1. PROPOSALS: Proposals submitted here under should be clear concise, and limited in content to that information required to qualify the prospective bidder and demonstrate ability to perform satisfactorily within the scope of this document. Information on existing equipment which may be modified to meet the goals of this study may be included at the contractor's option.

3.1.1 DELIVERY: While it is the wish of the Government to accomplish the aims of this project as expeditiously as possible, sufficient time should be allotted for thorough and complete accomplishment of the aims set forth herein. It is envisioned that Phase I should take approximately eight months. The time span for Phase II will be discussed upon solicitation of a proposal for performing that portion of the work.

3.2. ADMINISTRATION: The Government will retain overall control of this project. Objectives, costs, priorities, subcontractors and consultants involved in this program fall within the jurisdiction of the Government and approval must be obtained before these factors are employed.

3.3 CONTRACT INFORMATION: The contractor is expected to provide competent and cooperative administrative service. He will be vested with certain authority, with the guidance of the technical monitor, to control the direction and degree of technical effort within the bounds of the estimated costs.

3.3.1 CONTRACTOR RESPONSIBILITY: As a part of the overall responsibility, the contractor will be responsible for the work performed by all of his subcontractors and consultants.

3.3.2 TECHNICAL REPRESENTATIVE: The contracting officer will designate a Technical Representative to authorize specific development efforts of the contractor. Such authorization shall be given in writing in its original form or in confirmation of an oral authorization. The contractor will accept no other authorization except that of the Technical Officer or the contracting officer.

3.4 DOCUMENTATION:

3.4.1 Regular monthly reports and a final report will be required from the contractor under this program.

3.4.2 All reports will meet the requirements of the applicable portions of Specification DB 1001 dated 31 August 1966, GENERAL REQUIREMENTS FOR CONTRACTUAL DOCUMENTATION.

17 August 1966

DEVELOPMENT OBJECTIVE

COLOR PRINT DRYER

1. INTRODUCTION.

1.1. Purpose. This document contains the requirements for a Government sponsored study and development project for the investigation of advanced methods of drying photographic color prints.

1.2. Background. Drying color prints matte and glossy involves different operations and distinct problems.

Many of the methods and techniques employed to dry black and white paper prints cannot be successfully applied to color prints due to the softness of the color emulsions and their tendency to become excessively "tacky" during the drying process.

1.2.1. Current Procedure.

1.2.1.1. Glossy Color Prints. Glossy color prints are dried in much the same way as glossy black and white prints. During the drying process, the emulsion is kept in contact with a highly polished chromed surface, usually a drum. The gelatin of the emulsion forms to the surface of the chromed plate or drum, leaving the print with a high gloss finish. Although many commercial dryers for black and white materials are used to dry glossy color prints (for example - Pako Drum Dryers), the drying process for glossing color prints is very critical. The drum has to be kept perfectly clean and polished, and sometimes it is necessary to condition the drum surface with glycerine and water to maintain a slick surface. Also, the temperature and speed of the dryer have to be kept within close tolerances. If these conditions are not closely adhered to, the prints will generally stick to the drum surface. Even when the operation is successful, the volume is limited because the dryers must use a slower speed for color print materials.

1.2.1.2. Matte Color Prints. There are no commercial print dryers that can rapidly dry color prints matte, in a quality manner; that is, dry them so there is no evidence of abrasions, scratches, emulsion frilling, curl, cracks, color shifts, etc. The most accepted method uses hot air drying racks. The prints are placed face up on a saran mesh shelf in the rack, where hot air is circulated around

them. This process takes at least 20 minutes and leaves curled and wavy prints, which then have to be flattened in a dry mounting press. During the flattening process there is danger of cracking the emulsion.

The other method of drying prints matte is to place them on a rack and allow them to air dry without applying heat. This method usually prevents severe curl in the prints, but it requires several hours of drying time.

In black and white photography, matte prints are usually dried around a drum with the print surface held against a canvas belt during the drying process. This method cannot be used for color prints because either the color emulsions adhere to the canvas belt or the belt marks the soft color print surface.

2. CONCEPT.

2.1. Purpose. The proposed program will encompass a thorough investigation and analysis of all advanced techniques in the area of color print drying. These techniques will be evaluated and the most feasible method for each of the two print (i.e. matte & glossy) drying requirements will be selected. Based on the selected techniques, one or two equipments for rapidly drying high-quality color paper prints shall be fabricated.

2.2. Scope. The total effort, as outlined above, will be divided into two separate but interrelated phases; continuance from the first phase to the second phase will be dependent on the successful accomplishment of Phase I. Proposals solicited at this time will be restricted to the tasks outlined in Phase I.

2.2.1. Phase I Investigation & Design Analysis. The contractor must extensively and exhaustively investigate all advanced drying techniques that may apply to the problem of drying color paper print materials matte and glossy. Emphasis must be placed on feasible solutions directed toward rapid, automated, high-quality drying systems. The techniques must be applicable to a system which will dry color prints in the best quality manner possible (Ref. Par 1.2.1.2.). At the conclusion of the investigation portion of Phase I, the contractor will present to the Government representative details of recommended techniques which can be applied to the development of a color print dryer or dryers. Advantages and disadvantages and ease of application of each alternate technique will be presented. Upon concurrence of the recommendations by the Government, the contractor will proceed to develop laboratory models or breadboard hardware which will successfully demonstrate the application of the most appropriate recommended techniques.

2.2.2. Phase II Equipment Prototype. Based on the successful demonstration of techniques in Phase I, it is presently planned to proceed to a hardware prototype stage. It would be desirable to combine both drying requirements into a single dryer. However, if separate components are proved necessary to solve the problems of drying color prints matte and glossy, this alternative will be considered. The prototype hardware will be suitable for installation and use in an operational area. More definitive specifications for prototype equipment will accompany the request for a proposal for performing this phase of the program.

3. GENERAL.

3.1. Proposals. Proposals submitted hereunder should be clear, concise, and limited in content to that information required to qualify the prospective bidder and demonstrate ability to perform satisfactorily within the scope of this document. Information on existing equipment which may be modified to meet the goals of this study may be included at the contractor's option.

3.1.1. Delivery. While it is the wish of the Government to accomplish the aims of this project as expeditiously as possible, sufficient time should be allotted for thorough and complete accomplishment of the aims set forth herein. It is envisioned that Phase I will take approximately eight months. The time span for Phase II will be discussed upon solicitation of a proposal for performing that portion of the work.

3.2. Administration. The Government will retain overall control of this project. Objectives, costs, priorities, subcontractors and consultants involved in this program fall within the jurisdiction of the Government and approval must be obtained before these factors are employed.

3.3. Contract Information. The contractor is expected to provide competent and cooperative administrative service. He will be vested with certain authority with the guidance of the technical monitor to control the direction and degree of technical effort within the bounds of the estimated costs.

3.3.1. Contractor Responsibility. As a part of the overall responsibility, the contractor will be responsible for the work performed by all of his subcontractors and consultants.

3.3.2. Technical Representative. The contracting officer will designate a Technical Representative to authorize specific development efforts of the contractor. Such authorization shall be given in writing in its original form or in confirmation of an oral authorization. The contractor will accept no other authorization except that of the Technical Officer or the contracting officer.

3.4. Documentation.

3.4.1. Regular monthly reports and a final report will be required from the contractor under this program.

3.4.2. All reports will meet the requirements of the applicable portions of Specification DB 1001 dated 31 August 1966, GENERAL REQUIREMENTS FOR CONTRACTUAL DOCUMENTATION.